

Claims 1-28 are pending, of which 1-28 have been rejected. The Examiner, under 35 U.S.C. 102(b), rejected Claim 11 as being anticipated by Applicant's Admitted Prior Art (hereinafter AAPA) (Description of Related Art).

In the AAPA, the inventor discusses two different types of magnetic tape cartridges. As stated in the AAPA, two of the cartridge formats most widely used currently around the world are the so called Magstar and LTO formats, each characterized in detail by corresponding ECMA (European Computer Manufacturers Association) standards. Each format is prescribed structural attributes adapted to function with conforming standard features in automated mechanisms of corresponding drive, picker, and library systems.

An example of a Magstar cartridge is illustrated in Figs. 1-3 of the AAPA. This cartridge is characterized by a sloped face in the bottom of the rear side, with the angle formed by this sloped face being defined by ECMA standards. Additionally, two locating notches conforming to the Magstar ECMA standard (hereinafter Magstar locating notches) are provided in the bottom of each lateral side for engagement by corresponding locating pins when

the cartridge is placed in a drive.

In similar fashion, the LTO cartridge is illustrated in Figs. 5-7 of the AAPA. This cartridge is characterized by a V-shaped notch in the bottom front side of the cartridge and two different types of locating notches conforming to the LTO ECMA standard (hereinafter LTO locating notches). The first LTO locating notch is an approximately square hole at least 5 mm deep with a side of approximately 3 mm located with its center approximately 20.5 mm from the front side of the cartridge and 11.45 mm from the left side. The second LTO locating notch is a hole at lest 5 mm deep defining an approximately oval aperture with a major dimension of at least 4.8 mm parallel to the cartridge's front side and a minor dimension of approximately 3 mm with its center approximately 20.5 mm from the front side of the cartridge and 86.15 mm from the center of the first LTO locating notch. The Vshaped notch also conforms to the LTO ECMA standard and is at least 8.90 mm deep and has a rounded bottom with a maximum radius of 1.50 mm centered about 5.05 mm from the front side of the cartridge extending symmetrically from its bottom toward the front side of the cartridge at an angle of approximately 60 degrees.



The invention claimed by the inventor may be used in either type of drive. This is conveyed by the preamble of Claim 11, wherein the inventor claims a dual purpose magnetic tape cartridge. No such dual purpose magnetic tape cartridge was disclosed in the AAPA.

In order to provide this dual purpose functionality, the inventor claims, in Claim 11, a magnetic tape cartridge including the sloped face of a Magstar cartridge, two LTO locating notches, and the v-shaped notch characteristic of an LTO cartridge. There is no disclosure in the AAPA regarding a single apparatus containing these features. Accordingly, the inventor respectfully submits that Claim 11 is not anticipated by the AAPA, is therefore novel, and is in proper form for allowance.

The Examiner also rejected Claims 1-10 and 12-28 under 35 U.S.C. 103(a) as being unpatentable over the AAPA. In Claim 1, the inventor claims a dual-purpose magnetic-tape cartridge for alternative use in Magstar or LTO automated picker systems including a rear side conforming to Magstar format specifications (sloped face in the bottom of the rear side) and wherein a rear portion of each lateral side contains a recessed surface offset by about 1.8 mm therefrom and extending forward from the rear side and said recessed surface further contains an LTO gripping



notch at least 4.75 mm deep, extending at least 8.7 mm in height from the bottom side and extending about 6.00 mm in width from approximately 14 mm to approximately 20 mm from the rear side of the cartridge.

With regard to Claims 1-10, the Examiner concedes that the AAPA does not teach a rear portion of each lateral side containing a recessed surface offset by about 1.8 mm therefrom and extending forward from said rear side. However, the Examiner states that it is obvious to make the claimed invention because the modification is simply changing the size based upon design choice.

The inventor respectfully disagrees. There is no indication in the AAPA of utilizing a recessed surface, of any dimension, in addition to the Magstar sloped rear face and the LTO gripping notches. There is simply no pre-existing recessed surface feature disclosed in the AAPA which could be considered the basis for the inventor carrying forward another's invention.

According to the main aspect of the invention, as illustrated in Figs. 11 and 12, the bottom portion of the rear side 92 of the cartridge 80 is reduced in width to conform to the width of an LTO cartridge, thereby providing a recessed surface 98 parallel in each lateral side extending to a distance of about 19.0 mm



from the rear side 92 of the cartridge. This distance corresponds to the location of the front edge of the locating notches 30 in a standard Magstar cartridge. It is important to note that the Magstar locating notches 30 have been replaced with the recessed surfaces 98. This is more than a simple change of dimensions based upon design considerations. It is a wholesale replacement of one feature (the Magstar locating notches) with another (the recessed surfaces).

Since this distance also corresponds to the location of the front edge of the LTO gripping notches 42, this correspondence is exploited to conform the cartridge 80 to LTO gripping-notch standards by providing gripping notches 100 within the recessed surface 98. It is noted that the recessed surface 98 on each side of the cartridge 80 is limited to the bottom portion of the cartridge because the Magstar-format width in the top portion needs to be retained to provide a continuous contact surface for rollers employed by Magstar drive mechanisms. Accordingly, the features described in Claim 1 are not modifications of dimensions based upon design choice. They are the inventive features necessary to carry out the inventor's invention.

It is important to note that the Magstar cartridge and the LTO cartridge are designed to work in automated mechanisms of



corresponding drive, picker, and library systems. The Magstar ECMA standard does not address adapting a cartridge to fit in an LTO drive or work with an LTO picker robot. Nor does the LTO ECMA standard address adapting a cartridge to fit in a Magstar drive or work with a Magstar picker robot. There is no suggestion in the art to combine the features of the two standards to produce a common cartridge operable with both types of drives and picker robots. Additionally, the only motivation to combine these features has been provided by the inventor.

It may be reasonably argued that manufacturers of both Magstar and LTO drives have a vested interested in ensuring that only cartridges designed to work with their corresponding systems are compatible with these systems. This results in a situation where purchasers of either Magstar or LTO drives are forced to buy cartridges from the limited number of companies which are licensed to make that particular brand of cartridge. In fact, the various locating notches, sloped faces, and v-shaped notches may be viewed as an attempt to differentiate each brand's cartridges from their competitors and, as such, the process of adaptation to dual-purpose function requires more than a simple duplication of features and more than an obvious modification based on design choice.



On the other hand, the present invention is based on adapting a cartridge according to both the Magstar ECMA standard and the LTO ECMA standard and adding a recessed surface. Again, there is no suggestion in the art to combine these features outside the motivation provided by the inventor. While the Magstar ECMA standard and the LTO ECMA envision a single use for corresponding cartridges, the cartridged claimed by the inventor in Claim 1 is a dual-purpose magnetic-tape cartridge. Accordingly, the inventor respectfully submits that Claims 1-10 are not obvious under the AAPA and are in proper form for allowance.

With regard to Claims 12-28, the Examiner again states that "One of ordinary skill in the art at the time of the invention would have been motivated to make the magnetic tape cartridge of AAPA with the claimed dimensions because the modification is carrying forward another's invention by changing the size based upon design choice." For the reasons stated above and other to follow, the inventor respectfully disagrees.

The invention claimed by the inventor in Claims 12-28 is not a modification of dimensions based upon design choice. Rather, it is the unique combination of features necessary to carry out the inventor's invention. For example, in Claim 12, the inventor



claims a magnetic tape cartridge including the sloped face of a Magstar cartridge, two LTO locating notches, and the v-shaped notch characteristic of an LTO cartridge wherein the first LTO locating notch is positioned about 13.25 mm from the left side and the second LTO locating notch is positioned about 9.6 mm from the right side of the cartridge.

As noted above, the AAPA does not include a suggestion or motivation in the art to combine these features to produce a single apparatus capable of working with both the Magstar and the LTO standards. In fact, the manufacturers of each type of drive may have a strong incentive (financial and otherwise) in making it difficult for other types of cartridges to work with their drives, as previously indicated. Accordingly, the inventor submits that Claims 12-28 are not obvious under the AAPA and are in acceptable form for allowance. Therefore, we respectfully request reconsideration of the rejection.

The applicant and his attorney thank the Examiner for the thorough examination of the application. No fee is believed to be due. Should there be any unforeseen cost, please charge any cost associate with this transmittal to our Deposit Account No. 17-0055.



Respectfully submitted,

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